

1108542

https://www.phoenixcontact.com/us/products/1108542

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Smart Ethernet Box for connecting PoE end devices, four PoE ports, two uplink ports (RJ45), integrated managed switch and surge protection, supply voltage 100 ... 240 V AC, wall or mast mounting

Product description

The Smart Ethernet Box is used to connect PoE end devices such as IP cameras to a video server. You can use the Smart Ethernet Box to supply voltage to PoE end devices and other external devices. The Smart Ethernet Box is a manageable outdoor PoE switch with a power supply unit, a wiring space for the AC voltage supply, replaceable surge protective modules, and an area with an integrated 24 V DC supply and a DIN rail for mounting additional devices. The Smart Ethernet Box integrates the functions of conventional connection boxes equipped with standard DIN rail devices in a compact device. This saves you time during planning and installation. Numerous management and monitoring functions ensure reliable operation of the system.

Your advantages

- · Cost savings with an all-in-one solution that provides all functions in a single device
- · Significant time savings with adapter for wall and mast mounting
- · Minimal wiring effort
- · Replaceable surge protection
- A wide range of alarm messages via SNMP, such as in the event of sabotage attempts or defective surge protection
- · Advanced PoE management for reliable operation of IP cameras
- · Quick and easy startup and configuration via web-based management or the FL Network Manager software
- · Resistant to salt spray

Commercial data

Item number	1108542
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN08
Product key	DNC371
GTIN	4063151015114
Weight per piece (including packing)	4,999 g
Weight per piece (excluding packing)	4,315 g
Customs tariff number	85176200
Country of origin	DE



1108542

https://www.phoenixcontact.com/us/products/1108542

Technical data

Dimensions

Dimensional drawing	
Width	284 mm
Height	364 mm
Depth	121 mm

Notes

Note on application

Note on application	Only for industrial use
• •	•

Material specifications

Color (Housing)	light gray (RAL 7035)
Material (Housing)	Polycarbonate
Material (Cable gland)	Polyamide
Material (Cable gland seal)	Neoprene
Flammability rating according to UL 94	V0 (Housing, a vertically clamped sample is extinguished within 10 seconds, no flaming droplets of molten plastic, smoldering for a maximum of 60 seconds)
	V2 (Cable gland; a vertically tensioned sample is extinguished within 30 seconds; flaming droplets are permitted)

Mounting

Mounting type	Panel mounting
	Mast mounting

Interfaces

Transmission medium

Basic functions	Store-and-forward switch, complies with IEEE 802.3
Data: Ethernet / Fast Ethernet / Gigabit Ethernet	
Transmission speed	10/100/1000 Mbps
Connection method	RJ45 jack
Note on the connection method	Auto negotiation and autocrossing
No. of channels	4 (RJ45 PoE ports)
Transmission length	100 m (per segment)

Copper



1108542

https://www.phoenixcontact.com/us/products/1108542

Basic functions

Insulation characteristics

Protection class

Insulation characteristics

Overvoltage category

Maximum output power	165 W (>55°C derating, see data sheet)
	155 W (If switching output is active, >55°C derating)
	90 W (per port POE13, >50°C derating, see data sheet)
	30 W (POE4)
Data: Ethernet / Fast Ethernet / Gigabit Ethernet	
Transmission speed	10/100/1000 Mbps
Connection method	RJ45 jack
No. of channels	2 (RJ45 ports)
Transmission length	100 m (per segment)
Transmission medium	Copper
Data: Configuration interface	
Connection method	RJ45 jack
No. of channels	1 (RJ45 port)
Data: Switching output	
Connection method	Push-in spring connection
No. of channels	1 (Push-in Technology)
Single conductor/terminal point, rigid	0.2 mm² 1.5 mm²
Single-wire/terminal point, flexible	0.2 mm² 1.5 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.75 mm² (Stripping length 8 mm)
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm² (Stripping length 8 mm)
Max. AWG conductor cross-section, flexible	16
Min. AWG conductor cross-section, flexible	24
Stripping length	10 mm
Load/output load current output	no inductive load
Output nominal voltage	24 V DC ±10 % (Supply for devices within the Smart Ethernet Box)
Output current	300 mA (typical)
oduct properties	
Product type	Switch
Product family	Smart Ethernet Box
MTTF	441 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)

224 Years (SN 29500 standard, temperature 40°C, operating

92 Years (SN 29500 standard, temperature 40°C, operating

Store-and-forward switch, complies with IEEE 802.3

I (Protective grounding of all conductive housing parts)

III (With protection modules plugged in)

cycle 34.25%)

cycle 100%)



1108542

https://www.phoenixcontact.com/us/products/1108542

ferrule with plastic sleeve

Single conductor/terminal point, rigid

Single-wire/terminal point, flexible

	II (Without protection modules)
Pollution degree	2
witch functions	
Diagnostic functions	RMON History
	LLDP (Link Layer Discovery Protocol)
	SNMP traps
	N:1-Portmirroring
	ACD (Address Conflict Detection)
Basic functions	Store-and-forward switch, complies with IEEE 802.3
Filter functions	Port prioritization
	VLAN (up to 32 VLANs)
IP parameterization	DHCP client
	BootP
	Static IP address
MAC address table	8k
Management	Web-based management (HTTP/HTTPS)
	SNMPv2/v3
	Command Line Interface (Telnet, SSH)
Redundancy	RSTP (Rapid Spanning Tree Protocol in accordance with IEEE 802.1D-2004)
	Large Tree Support
	FRD (Fast Ring Detection)
Additional functions	Jumbo frames
Time synchronization	SNTP (Simple Network Time Protocol)
ecurity functions	
Basic functions	Store-and-forward switch, complies with IEEE 802.3
ctrical properties	
Maximum power dissipation for nominal condition	min. 7 W (at 230 V AC, standby mode)
· · · · · · · · · · · · · · · · · · ·	
Rated insulation voltage	3 kV AC (Input / output, IEC/EN 60950-1)
upply	

 $1\ mm^2 \dots 6\ mm^2$

 $0.2~\text{mm}^2\ldots 6~\text{mm}^2$



1108542

https://www.phoenixcontact.com/us/products/1108542

Conductor cross-section, flexible [AWG]	24 10
Stripping length	10.00 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 (in accordance with DIN EN 60529: Complete touch protection, dust cannot enter, spray water from any direction)
Impact strength	IK10 (in accordance with IEC 62262: Impact energy of 20 J, corresponds to 5 kg from a height of 40 cm)
Ambient temperature (operation)	-40 °C 70 °C (>50°C derating)
Ambient temperature (storage/transport)	-40 °C 85 °C
Altitude	2000 m
Permissible humidity (operation)	10 % 95 % (non-condensing)

Standards and regulations

Other resistance	UV-resistant in accordance with UL746C, f1 listing/rating (Outdoor housing, subject to 1,000 hour xenon weather testing, 7-day water submergence test)
	Resistant to salt spray in accordance with IEC 60068-2-11 (96 h in 5% salt spray)
Standards/regulations	IEC 62444
Standard designation	Strain relief
Standards/regulations	IEC 61249-2-21
Standard designation	Halogen-free (housing, bromine: <900 ppm, chlorine: <900 ppm, total halogen content: <1,500 ppm)
Standards/regulations	DIN EN 45545-2, requirement set R22, hazard level HL3
Standard designation	Fire protection

Approvals

CE

Certificate	CE-compliant
UL, USA/Canada	
Identification	Listed
	UL 61010-1, 3rd Edition
	UL 61010-2-201, 2nd Edition
	CAN/CSA C22.2 No. 61010-1-12
	CSA C22.2 No. 61010-2-201:18
Corrosive gas test	
Identification	ISA-S71.04-1985 G3 Harsh Group A

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2
Noise emission	



1108542

https://www.phoenixcontact.com/us/products/1108542

Standards/regulations	EN 61000-6-4, Class B, domain of use: residential and small commercial
Electrostatic discharge	
Standards/regulations	EN 61000-4-2
Electrostatic discharge	
Contact discharge	± 6 kV
Discharge in air	± 8 kV
Indirect discharge	± 6 kV
Comments	Criterion B
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Frequency range	80 MHz 3 GHz (80% amplitude modulation with 1 kHz)
Field intensity	10 V/m
Comments	Criterion A
Fast transients (burst)	- 1101000 1 1
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Input	± 2.2 kV (1 minute)
Signal	± 2.2 kV (1 minute)
Comments	Criterion B
Surge current load (surge)	
Standards/regulations	EN 61000-4-5
Surge current load (surge)	
Input	± 1 kV (AC supply, line to line)
· ·	± 2 kV (AC supply, line to ground)
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	
Frequency range	0.15 MHz 80 MHz (80% amplitude modulation with 1 kHz)
Comments	Criterion A
Voltage	10 V
Emitted interference	
Standards/regulations	EN 61000-6-4
Comments	Class B, domain of use: residential and small commercial
Criteria	
Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected



1108542

https://www.phoenixcontact.com/us/products/1108542

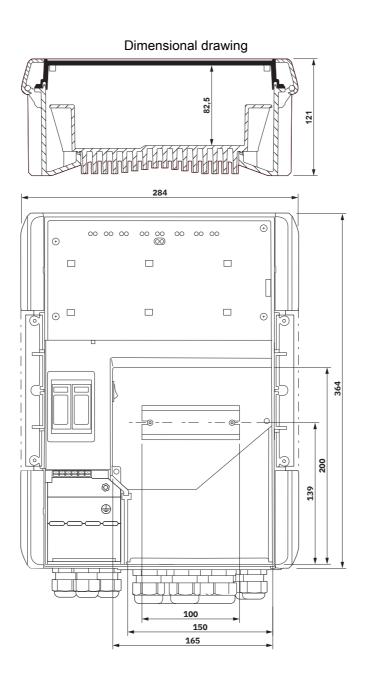
	by the device itself.
System properties	
Functionality	
Basic functions	Store-and-forward switch, complies with IEEE 802.3



1108542

https://www.phoenixcontact.com/us/products/1108542

Drawings

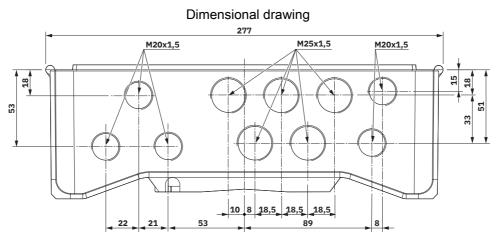


Dimensions

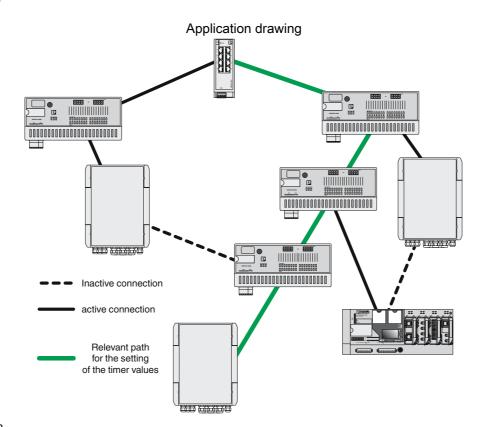


1108542

https://www.phoenixcontact.com/us/products/1108542



Underside dimensions



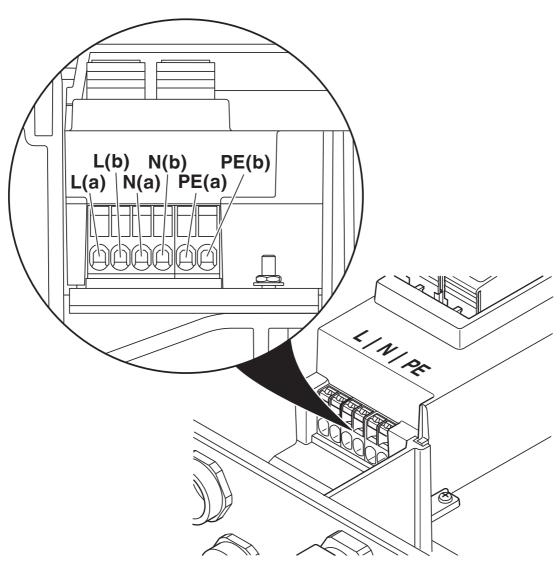
Redundancy via RSTP



1108542

https://www.phoenixcontact.com/us/products/1108542

Connection diagram

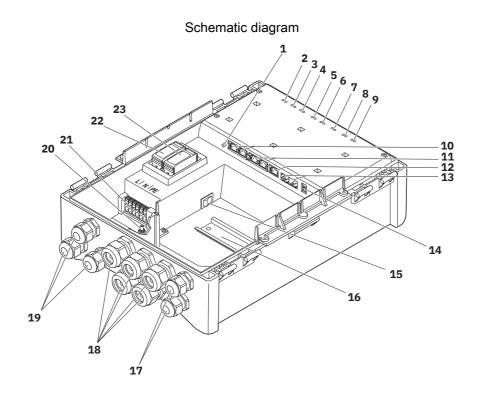


Connecting the supply voltage



1108542

https://www.phoenixcontact.com/us/products/1108542



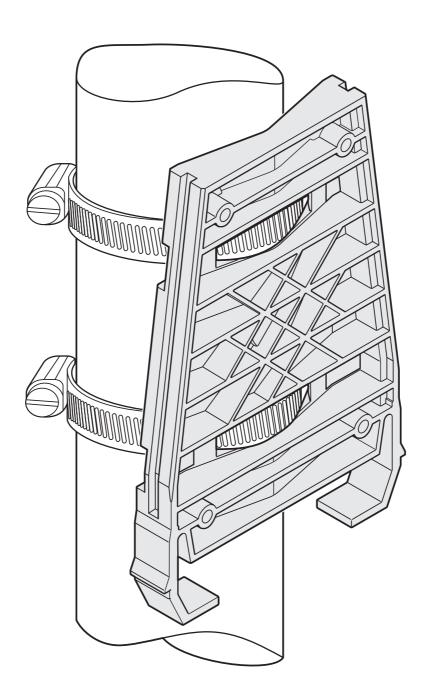
Function elements



https://www.phoenixcontact.com/us/products/1108542



Schematic diagram

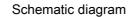


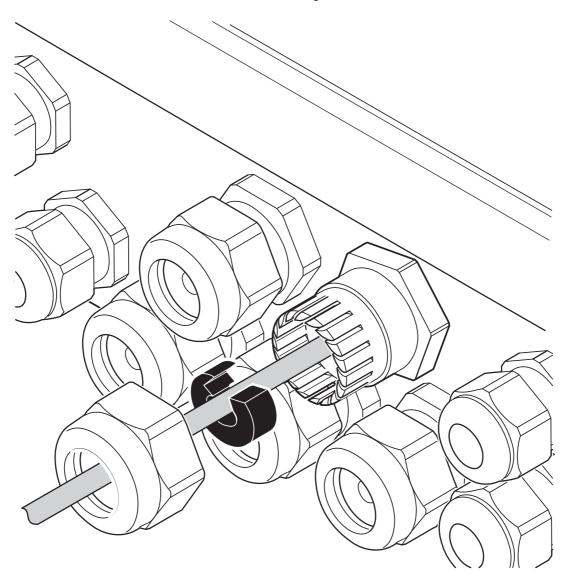
Mast mounting



1108542

https://www.phoenixcontact.com/us/products/1108542



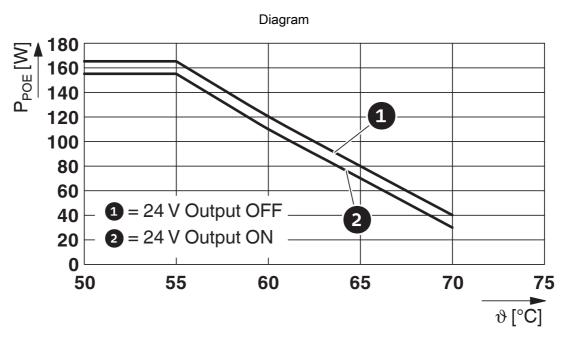


Cable gland

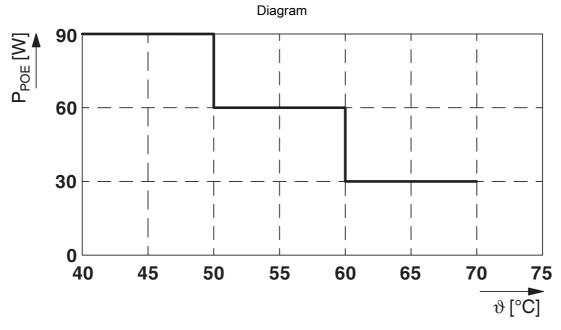


1108542

https://www.phoenixcontact.com/us/products/1108542



Derating (PoE power total)

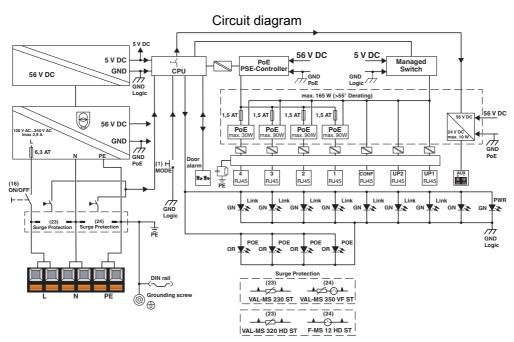


Derating per port



1108542

https://www.phoenixcontact.com/us/products/1108542



Basic circuit diagram



1108542

https://www.phoenixcontact.com/us/products/1108542

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1108542



cULus ListedApproval ID: E238705



1108542

https://www.phoenixcontact.com/us/products/1108542

Classifications

ECLASS

	ECLASS-13.0	27180590			
	ECLASS-15.0	27180590			
ΕT	ETIM				
	ETIM 9.0	EC000261			
UNSPSC					
	UNSPSC 21.0	31261500			



1108542

https://www.phoenixcontact.com/us/products/1108542

Environmental product compliance

EU RoHS

10.10	
Fulfills EU RoHS substance requirements	Yes
Exemption	6(a)-l, 6(c), 7(a), 7(c)-l
China RoHS	
Environment friendly use period (EFUP)	EFUP-25
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
U REACH SVHC	
REACH candidate substance (CAS No.)	Diboron trioxide(CAS: 1303-86-2)
	Lead monoxide (lead oxide)(CAS: 1317-36-8)
	Lead(CAS: 7439-92-1)
	0.01 47 to 4.5 1.1.0.01 moth board a constitution (0.40, 47, 4)
	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com